National Academy of Sciences Panel Proposes New Approach to Regulating Wind-Energy Development

May 3, 2007 -- Congressman
Alan Mollohan said Thursday that a study by the prestigious National Academy of Sciences sets out a new, comprehensive approach for evaluating proposals to construct industrial wind-energy projects in West Virginia and elsewhere around the United States.

Mollohan said that under the study's approach, the environmental impacts of proposed wind-energy projects - including their visual impacts in scenic areas, and their impacts on birds, bats and other wildlife - would be carefully scrutinized before decisions are made on whether those projects should go forward.

The study committee, in making its recommendations, stated that it was struck by the many shortcomings of the current wind-energy review processes, including the "minimal guidance" that is provided on such matters as "the degrees of adverse or beneficial effects of proposed wind developments to consider critical for approving or disallowing a proposed project," and "the competing costs and benefits of a proposed project to weigh, and how to weigh them . . . ." The report also highlights the environmental impacts of wind-energy projects that cannot yet be fully assessed because the necessary scientific data hasn't yet been collected, and makes recommendations for further research.

The report, "Environmental Impacts of Wind-Energy Projects," is the culmination of a two-year study that was undertaken at the direction of Congress under a provision sponsored by Mollohan.

"The recommendations seem to represent a common-sense approach to wind-energy development," Mollohan said. "Before decisions are made on building wind turbines across the mountain ridges of West Virginia, we should have a good idea of what both the long-term costs and the benefits of those projects will be to West Virginians, now and in the future. I know there can be honest disagreements about what the costs and benefits will be, and how they should be weighed. But I hope no one would disagree with the proposition that the decisions to be made on wind turbines - which raise the prospect of permanently altering the face of our state - should be made in a fully informed, considered way."

In accordance with congressional provision directing the study, the report focuses on the mid-Atlantic region, including West Virginia, as a case example, and the report gives ample reason for caution in proceeding with wind-energy development in the mid-Atlantic. For example, according to the report -

- In the mid-Atlantic region, the availability of wind energy is lowest during the time when the growth in demand for electricity is the highest - that is, the afternoon hours of summer months.

- Because the major benefit claimed for wind-energy is that it would reduce harmful emissions that contribute to global warming, the study committee estimated the impact that wind-energy development would have on emissions by the year 2020. With regard to two major types of emissions, NO2 (oxides of nitrogen) and SO2 (sulfur dioxide), the committee concluded that "development of wind-powered electricity generation using current technology probably will not result in a significant reduction in total emission of these pollutants from EGUs [electricity-generating units] in the mid-Atlantic region." The committee also found that wind energy would have a relatively minor impact nationwide on emission of CO2 (carbon dioxide), but stated that "the degree to which its beneficial effects would be felt in the [mid-Atlantic region] is uncertain."

- Regarding the impact of wind-energy development on birds in the region, "There is insufficient information available at present to form a reliable judgment on the likely effect of all the proposed or planned wind-energy installations in the mid-Atlantic region on bird populations."

- Regarding the huge numbers of bat deaths that have been recorded at industrial wind-energy projects in the mid-Atlantic, the committee

stated, "Proceeding with large-scale development of wind-energy facilities before identifying risks likely threatens both bats and the public acceptance of wind energy as an environmentally friendly form of energy . . . . Thus the initial developments should be used as an opportunity to understand the risks before the full wind-energy potential of the Mid-Atlantic Highlands are developed."

"Another key subject covered in the report is the impact that industrial wind turbines can have on scenic views," Mollohan said. "That part of the report applies to the mountain vistas that are so important to West Virginia's tourism and recreation industries. At times the wind-energy industry advocates have tried to minimize the importance of this matter, claiming that it is entirely subjective, and that beauty is in the eye of the beholder. But the committee's report makes it clear that there are established methods of evaluating the visual impacts of facilities like industrial wind-turbines, and making judgments on whether or not the impacts that a particular project would have are acceptable. The report makes it clear that evaluation of visual impacts should be an integral part of the review of every proposed project.

"Decision-making on individual wind-energy projects is probably going to continue to be made largely at the state and local levels. But as the committee points out, there is an important role for the federal government to play in setting national-level energy policies that minimize the negative impacts of wind energy and enhance its benefits. Earlier this week the House Natural Resources Committee held the first-ever congressional hearing on the wildlife impacts of wind-energy. Now that we have a better idea of the negative impacts that wind-energy projects can have in some circumstances, I look forward to working with my colleagues to ensure that federal policy will focus on environmentally responsible wind-energy development."

Further information on the report, including information on obtaining a copy of the report, is available on the Web site of the National Academies, www.nationalacademies.org.